Appln. No. 10/599,682

Applicants: U. Issberner et al.

Response to Action dated 07/17/08

Claim Amendments

Please enter the following amended claims in the application. The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

- 1. (Cancelled)
- 2. (Cancelled)
- 3. (Currently Amended) A fatty acid ester mixture of pentaerythritol, a pentaerythritol oligomer, or mixtures thereof, wherein the fatty acid component is The fatty acid ester according to Claim 1, wherein the fatty acid ester is obtained by esterification of pentaerythritol, a pentaerythritol oligomer, or mixtures thereof with a fatty acid present as a mixture containing from about 40% to about 50% by weight of a C₁₆ fatty acid and from about 45% to about 55% by weight of a C₁₈ fatty acid, and wherein the ester contains less than 0.3% by weight C₁₇ fatty acid acyl groups and has a melting point of at least 30°C.
- 4. (Currently Amended) A fatty acid ester mixture of pentaerythritol, a pentaerythritol oligomer, or mixtures thereof, wherein the fatty acid component has 6 to 22 carbon atoms, and wherein the ester contains less than 0.3% by weight C₁₇ fatty acid acyl groups and has a melting point of at least 30°C The fatty acid ester according to Claim 2, with a percentage content of (a) from about 10% to about 25% by weight monoesters, (b) from about 25% to about 40% by weight diesters, and (c) from about 30% to about 45% by weight triesters.
- 5. (Currently Amended) A fatty acid ester mixture of pentaerythritol, a pentaerythritol oligomer, or mixtures thereof, wherein the fatty acid component has 6 to

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22 carbon atoms, and wherein the ester contains less than 0.3% by weight C₁₇ fatty acid

acyl groups and has a melting point of at least 30°C The fatty acid ester according to

Claim 2, with a percentage content of (a) from about 12% to about 19% by weight

monoesters, (b) from about 25% to about 35% by weight diesters, (c) from about 30% to

about 40% by weight triesters, and (d) from about 6 to about 11% by weight tetraesters.

6. (Currently Amended) A process for the production of a C₁₆/C₁₈ fatty acid

pentaerythritol ester comprising the steps of:

(A) providing about 1.8 to about 2.2 mol of a fatty acid mixture per mol of

pentaerythritol wherein the fatty acid mixture comprises from about 40% to about 50%

by weight of a C₁₆ fatty acid and from about 45% to about 55% by weight of a C₁₈ fatty

acid;

(B) esterifying component (A) at temperatures ranging from about 180°C to about

250°C in an inert gas atmosphere in the absence of solvent to form a reaction mixture;

<u>and</u>

(C) stirring the reaction mixture in vacuo until it has an acid value of less than 1

and an OH value of 145 to 158.

7. (Previously Presented) The process according to Claim 6, wherein water formed

in the reaction mixture of step (B) is removed by distillation.

8. (Previously Presented) The process according to Claim 6, wherein unreacted

pentaerythritol of step (C) is removed by filtration.

9. (Previously Presented) The process according to Claim 6, further comprising the

step of treating the reaction mixture with hydrogen peroxide.

10. (Previously Presented) The process according to Claim 6, wherein the fatty acid

mixture is derived from vegetable material.

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11. (Previously Presented) A cosmetic and/or pharmaceutical composition

comprising an ester formed by esterification of pentaerythritol, a pentaerythritol

oligomer, or mixtures thereof with C₆₋₂₂ fatty acids, wherein the ester contains less than

0.3% by weight C₁₇ fatty acid acyl groups and has a melting point of at least 30°C.

12. (Previously Presented) The composition according to Claim 11, wherein the ester

comprises (a) from about 5 to about 35% by weight monoesters, (b) from about 20 to

about 50% by weight diesters, and (c) from about 25 to about 50% by weight triesters.

13. (Previously Presented) The composition according to Claim 11, wherein the C₆₋₂₂

fatty acid is present as a mixture and comprises from about 40% to about 50% by

weight of a C₁₆ fatty acid and from about 45% to about 55% by weight of a C₁₈ fatty

acid.

14. (Previously Presented) The cosmetic composition according to Claim 11, wherein

the ester is present in a quantity of from about 0.1% to about 20% by weight.

15. (Previously Presented) The cosmetic composition according to Claim 11, further

comprising a wax component.

16. (Previously Presented) The cosmetic composition according to Claim 15, wherein

the wax component is selected from the group consisting of C₁₂₋₂₄ fatty alcohols and

C₁₂₋₂₄ partial glycerides.

17. (Previously Presented) The cosmetic composition according to Claim 11, further

comprising at least one nonionic surfactant.

18. (Previously Presented) The cosmetic composition according to Claim 17, wherein

the nonionic surfactant is selected from the group consisting of alkyl and alkenyl

oligoglycosides.

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- 19. (Previously Presented) The cosmetic composition according to Claim 11, further comprising at least one oil component which is liquid at 25°C.
- 20. (Previously Presented) The cosmetic composition according to Claim 11, comprising:
 - (a) from about 0.1% to about 10% by weight of the ester;
 - (b) from about 1% to about 25% by weight of at least one oil component which is liquid at 25°C;
 - (c) from about 0.1% to about 5% by weight of a C_{12-24} fatty alcohol, a C_{12-14} partial glyceride, and mixtures thereof;
 - (d) from about 0.5% to about 10% by weight of a C₈₋₂₄ alkyl oligoglucoside; and
 - (e) water.